

CLAIM AMENDMENTS

The present listing of claims is as follows:

1. (Previously presented) A process of manufacturing a high-intensity discharge lamp comprising an elongate ceramic discharge vessel surrounded by an outer envelope and having a wall which encloses a discharge space containing an inert gas, such as xenon, and an ionizable filling, wherein at both ends in said discharge space an electrode is arranged, between which electrodes a discharge arc can be maintained along a discharge path, characterized in that, in order to improve light transmission of the discharge vessel, said process comprises the step of placing the discharge vessel in contact with a suspension of inorganic particles and allowing the suspension to enter pores in said wall, thus completely coating the surface of said wall.
2. (Original) A process according to claim 1, wherein the suspension is applied to the surface of the discharge vessel in a dipping or spraying operation.
3. (Original) A process according to claim 1, wherein the coated discharge vessel is subsequently sintered in order to allow the coating to become an integral fused part of the ceramic wall of the discharge vessel.
4. (Original) A process according to claim 3, wherein the coated discharge vessel is sintered at a sintering temperature varying between 1150 and 1500°C.
5. (Original) A process according to claim 4, wherein the inorganic particles are Al₂O₃ particles, and wherein Al₂O₃ grains in the sintered material have an average grain size varying between 0.3 and 10 microns (μm)

6. (Previously presented) A high-intensity discharge lamp comprising an elongate ceramic discharge vessel surrounded by an outer envelope and having a wall which encloses a discharge space containing an inert gas, such as xenon, and an ionizable filling, wherein at both ends in said discharge space an electrode is arranged, between which electrodes a discharge arc can be maintained along a discharge path, characterized in that a coating of inorganic particles completely covers and is made an integral fused part of the ceramic wall of the discharge vessel, which integral fused part has a pore-filling effect such that the porosity of the finished ceramic wall of the discharge vessel is smaller than 0.01 %.
7. (Original) A high-intensity discharge lamp according to claim 6, wherein the integral fused part has a surface leveling and a smoothening effect such that the finished ceramic wall of the discharge vessel has a total transmission of more than 98%, the total forward transmission is above 80%, and the real in-line transmission lies between 6% and 80% (for a wall thickness of 0.3 mm and a wavelength of 640 nm).
8. (Original) A high-intensity discharge lamp according to claim 6, wherein said lamp is mounted in a lamp assembly for projection purposes.
9. (Previously presented) A high-intensity discharge lamp according to claim 6, wherein said lamp is mounted in a vehicle headlight.
10. (Previously presented) A high-intensity discharge lamp according to claim 6, wherein said lamp is mounted in a beamer multimedia projector.
11. (Previously presented) A process according to claim 1, wherein the suspension consists of an inorganic material dispersed in a liquid medium.

12. (Previously presented) A process according to claim 11, wherein the discharge vessel is made of the inorganic material.

13. (Previously presented) A process according to claim 11, wherein the inorganic material is Al₂O₃.

14. (Previously presented) A process according to claim 11, wherein the inorganic particles are non-conductive.

15. (Previously presented) A high-intensity discharge lamp according to claim 6, wherein the inorganic particles are non-conductive.

16. (Previously presented) A process of manufacturing comprising:
providing an elongate ceramic discharge vessel having a wall including pores;
mixing a suspension consisting of non-conductive inorganic particles dispersed in a liquid medium;
filling the pores with the suspension to form a coating; and
sintering the elongate ceramic discharge vessel to form the coating into an integral fused part of the wall.

17. (Previously presented) A process according to claim 16, wherein the elongate ceramic discharge vessel and the non-conductive inorganic particles are made of a same material.

18. (Previously presented) A process according to claim 17, wherein the same material is Al₂O₃.

19. (Previously presented) A process according to claim 16, wherein the non-conductive inorganic particles are made of a material selected from the group consisting of YAG (Y₃Al₅O₁₂), Y₂O₃, ALON, and PLZT (Pb-La-Zr-Ti).